

## CLAIMS

1. A inhibitor of cancer bone metastasis, wherein an inhibition substance of the activation of osteoclast caused by the degradation of a signaling molecule, TRAF6, in the activation of osteoclast, a suppressive substance of the differentiation from osteoclast precursor cells to mature osteoclasts, and/or a bone resorption inhibitor and/or a Cox2 synthesis inhibitor are combined.
2. A inhibitor of cancer bone metastasis, wherein an IL-12 production inducer as an inhibition substance of the activation of osteoclast caused by the degradation of a signaling molecule, TRAF6, in the activation of osteoclast, a tyrosine kinase inhibitor as a suppressive substance of the differentiation from osteoclast precursor cells to mature osteoclasts, and/or a bisphosphonate as a bone resorption inhibitor and/or a Cox2 synthesis inhibitor for inhibiting the stimulation of RANKL/RANK receptor are combined.
3. A inhibitor of cancer bone metastasis, wherein an inhibition substance of the activation of osteoclast caused by the degradation of a signaling molecule, TRAF6, in the activation of osteoclast, a suppressive substance of the differentiation from osteoclast precursor cells to mature osteoclasts, and/or a bone resorption inhibitor and/or a

substance enhancing the production of osteoprotegerin are combined.

4. The inhibitor of cancer bone metastasis according to any one of claims 1 to 3, wherein the tyrosine kinase inhibitor has a selectively targeting effect to at least one receptor from the followings:

HER2/neu, HER3, HER4, c-kit, PDGFR, bcr-abl and EGFR.

5. The inhibitor of cancer bone metastasis according to any one of claims 1 to 4, wherein IL-12 production inducer is a substance having a  $\beta 1,3/1,6$  glucan structure.

6. A method for preventing and treating cancer bone metastases by the inhibitor of cancer bone metastasis according to any one of claims 1 to 5.